

Arntl-Flox

Nomenclature	C57BL/6Smoc- <i>Arntl</i> ^{Em1(flox)Smoc}
Cat. NO.	NM-CKO-200063
Strain State	Sperm cryopreservation

Gene Summary

Gene Symbol Arntl	Synonyms	MOP3; Arnt3; Bmal1; BMAL1b; bHLHe5; bmal1b'
	NCBI ID	11865
	MGI ID	1096381
	Ensembl ID	ENSMUSG00000055116
	Human Ortholog	ARNTL

Model Description

These mice carry loxP sites flanking exon 8 of Arntl gene. When crossed with a Cre recombinase-expressing strain, this strain is useful in eliminating tissue-specific conditional expression of Arntl gene.

Research Application: Studies on the regulation of lipid metabolism by peroxisome proliferator-activated receptor alpha (PPARalpha) and circadian rhythm-related genes

*Literature published using this strain should indicate: Arntl-Flox mice (Cat. NO. NM-CKO-200063) were purchased from Shanghai Model Organisms Center, Inc..

Disease Connection

Diabetes Mellitus	Phenotype(s)	MGI:5576883 Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with Pdx1-cre mice.
	Reference(s)	Marcheva B, Ramsey KM, Buhr ED, Kobayashi Y, Su H, Ko CH, Ivanova G, Omura C, Mo S, Vitaterna MH, Lopez JP, Philipson LH, Bradfield CA, Crosby SD, JeBailey L, Wang X, Takahashi JS, Bass J, Disruption of the clock components CLOCK and BMAL1 leads to hypoinsulinaemia and diabetes. Nature. 2010 Jul 29;466(7306):627-31

Validation Data

No data